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In re Application of

Application Number

08/509,359

Filed

July 31, 1995

Art Unit

1645

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1.  I hereby request access under 37 CFR 1.14(e)(2) to the application file record of the above-identified ABANDONED Application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and is: (CHECK ONE)

(A) referred to in:

United States Patent Application Publication No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

United States Patent Number 1,395,960, column \_\_\_\_\_, line \_\_\_\_\_, or

an International Application which was filed on or after November 29, 2000 and which

designates the United States, WIPO Pub. No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

(B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or 1.14(e)(2)(i), i.e., Application No. \_\_\_\_\_, paper No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

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US006395960B1

(12) **United States Patent**  
St. George-Hyslop et al.

(10) Patent No.: **US 6,395,960 B1**  
(45) Date of Patent: **\*May 28, 2002**

(54) **TRANSGENIC MICE EXPRESSING HUMAN PRESENLIN PROTEINS**

(75) Inventors: Peter H. St. George-Hyslop; Johanna M. Rommens; Paul E. Fraser, all of Toronto (CA)

(73) Assignees: The Hospital for sick Children; HSC Research and Development Limited Partnership; The Governing Council of the University of Toronto, all of Toronto (CA)

(\*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/124,523**

(22) Filed: **Jul. 29, 1998**

**Related U.S. Application Data**

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(51) Int. Cl.<sup>7</sup> ..... **A01K 67/00; A01K 67/027; A01K 67/033**

(52) U.S. Cl. ..... **800/18; 800/12; 800/13; 800/14; 800/17**

(58) Field of Search ..... **800/8, 12, 13, 800/14, 17, 18**

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**Primary Examiner**—Deborah J. R. Clark

**Assistant Examiner**—Anne-Marie Baker

(74) **Attorney, Agent, or Firm**—Darby & Darby

(57)

**ABSTRACT**

The present invention describes the identification, isolation and cloning of two human presenilin genes, PS-1 and PS-2, mutations in which lead to Familial Alzheimer's Disease. Also identified are presenilin homologue genes in mice, *C. elegans* and *D. melanogaster*. Transcripts and products of these genes are useful in detecting and diagnosing Alzheimer's disease, developing therapeutics for treatment of Alzheimer's disease, as well as the isolation and manufacture of the protein and the constructions of transgenic animals expressing the mutant genes.